

WHAT IS CLAIMED IS:

1. A recirculation method of dialysate which comprises continuous flow of dialysate out of peritoneal cavity, recirculation through a closed line, filtering out of a portion of the dialysate through a semipermeable membrane on the way, supplementing a comparable volume of fresh dialysate through a semipermeable membrane having a maximum permeable molecule of up to 5,000 dalton, and returning into peritoneal cavity.
2. The recirculation method of dialysate according to Claim 1, wherein polymer osmotic agents is added to the recirculation line.
3. The recirculation method of dialysate according to Claim 2 wherein polymer osmotic agents is plasma protein or oligosaccharide.
4. The recirculation method of dialysate according to Claim 1, wherein osmotic agents selected from glucose, amino acids, fatty acids, and peptides is added to the recirculation line.
5. The recirculation method of dialysate according to Claim 1, wherein reductants or anti-oxidants are added to supplementing fluid.
6. The recirculation method of dialysate according to Claim 5, wherein reductants or anti-oxidants is glutathione, vitamin C or vitamin E.
7. The recirculation method of dialysate according to Claim 1, wherein stabilizers preventing the recycled protein denatured is added to supplementing fluid.
8. The recirculation method of dialysate according to Claim 1, wherein albumin is treated with reductants or anti-oxidants to activate before infusing into peritoneal cavity.